



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D119-646-314
Job Sheet 180142



Part No: D119-646-314

Job Qty: 2 ea

Part Name: Skidtube Protector, RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 6/29/18

Job Tracking No:

Due Date: 9/17/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV B IPP REV:A 15.12.10 NEW ISSUE DD VERF:JLM IPP REV:B 17.05.10 AS PER DSI9734 REV B
DD VERF:JFS IPP REV:C 17.08.16 AS PER DSI9734 REV C DD VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Lead Time	Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier			
90	Start up Operation	2 Ea	9/17/18		0.00	0.00	Start Up Stores/Pkg-1			6 AUG 02 2018
110	Packaging	2 pcs	9/17/18		0.00	0.00	Packaging1-1			6 AUG 02 2018
120	QC	2 pcs	9/17/18		0.00	0.00	QC4			6 AUG 02 2018
130	Packaging	2 pcs	9/17/18		0.00	0.00	Packaging3-1			6 AUG 02 2018
135	DC	2 pcs	9/17/18		0.00	0.00	DC			6 AUG 02 2018
140	QC21-FG	2 Ea	9/17/18		0.00	0.00	QC21			6 AUG 02 2018

Part Op 130 - Identify and pack for shipping as per PPP D119-646-314 Location:
Descriptions: 135 - Photocopy bluefile & type labels per PPP D119-646-314 CHG002

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN3-45A	Bolt	8 Ea (4 ea)	90-Start up Operation	
AN3-47A	Bolt	12 Ea (6 ea)	90-Start up Operation	
AN3-50A	Bolt	12 Ea (6 ea)	90-Start up Operation	
D3904-1	Washer	12 Ea (6 ea)	90-Start up Operation	
D4506-3	Washer	12 Ea (6 ea)	90-Start up Operation	
D5369-2	Cable Guard	2 Ea (1 ea)	90-Start up Operation	
D5371-2	Hook	2 Ea (1 ea)	90-Start up Operation	
D5372-1	Plug	2 Ea (1 ea)	90-Start up Operation	
D5374-1	Bushing	12 Ea (6 ea)	90-Start up Operation	
D5374-3	Bushing	16 Ea (8 ea)	90-Start up Operation	
D5376-1	Drilling Tool	2 Ea (1 ea)	90-Start up Operation	
MS21042L3	Nut	20 Ea (10 ea)	90-Start up Operation	
NAS1149D0332J	Washer	36 Ea (18 ea)	90-Start up Operation	
NAS1149D0316J	Washer	8 Ea (4 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	AN3-45A	8	3	0
	AN3-47A	12	80	0
	AN3-50A	12	38	0
	D3904-1	12	90	0
	D4506-3	12	9	0

604821

Plex 6/29/18 9:21 AM Dart.lajeunesse.marie

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

D5369-2	2	14	0
D5371-2	2	0	0
D5372-1	2	6	0
D5374-1	12	2	0
D5374-3	16	8	0
D5376-1	2	5	0
MS21042L3	20	1,209	0
NAS1149D0316J	8	633	0
NAS1149D0332J	36	1,549	0

Part Specifications

Specifications could not be found.

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Container No: S098632



Part: D119-646-314

Job No: 180142

Serial No/Batch: S098632

Revision: C

Inspector:

Exp Date:

Instructions: FAA STC SR02024SE 15/10/2018 TC STC LoA P-09-0407-RDIMS

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CANADA
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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					



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Container View (Active) - Master Unit Containers

Master Unit No	Container No	Part No	Part Name	From Container	Current Location	Quantity
004821	S001638	AN3-45A	Bolt		ST346	1
004821	S098631	AN3-45A	Bolt	s093618	ST346	7
004821	S098628	AN3-47A	Bolt	s071346	ST346	12
004821	S098627	AN3-50A	Bolt	s071341	ST346	12
004821	S098626	D3904-1	Washer	S055204	ST055	12
004821	F163582-1	D5369-2	Cable Guard		ST479A	2
004821	S098619	D5371-2	Hook	S097211	ST159	2
004821	S098618	D5372-1	Plug	S052547	ST159	2
004821	S076351	D5374-1	Bushing	S076350	ST159	2
004821	S098617	D5374-1	Bushing	S095613	ST159	10
004821	S077396	D5374-3	Bushing	S077395	ST159	8
004821	S098613	D5374-3	Bushing	S096646	ST159	8
004821	S045117	D5376-1	Drilling Tool	S045117	ST365	1
004821	S098610	MS21042L3	Nut	s089340	ST303	20
004821	S098606	NAS1149D0316J	Washer	fm134502-2	ST264	8
004821	S098607	NAS1149D0332J	Washer	s035396	ST264	36

Note: Ad hoc query view of Part.dbo.Container where Container.Active = 1.

Plex 8/2/18 10:30 AM dart.quirion.sonia

M. Ssing
 1045063 5049907 x9 3x 508709

10.0 PARTS LIST:

Qty. -313	Qty. -314	PART NUMBER	DESCRIPTION
X		D119-646-313	SKIDTUBE PROTECTOR, LH
	X	D119-646-314	SKIDTUBE PROTECTOR, RH
6	6	D3904-1	WASHER
6	6	D4506-3	WASHER
1		D5369-1	CABLE GUARD, LH
	1	D5369-2	CABLE GUARD, RH
1		D5371-1	HOOK, LH
	1	D5371-2	HOOK, RH
1	1	D5372-1	PLUG
6	6	D5374-1	BUSHING
8	8	D5374-3	BUSHING
1	1	D5376-1	DRILLING JIG
4	4	AN3-45A	BOLT
6	6	AN3-47A	BOLT
6	6	AN3-50A	BOLT
18	18	NAS1149D0332J	WASHER
4	4	NAS1149D0316J	WASHER
10	10	MS21042L3	NUT

11.0 WEIGHT AND BALANCE

The following weight and balance changes are applicable:

Installation	Weight	LONGITUDINAL		LATERAL	
		Arm	Moment	Arm	Moment
D119-646-313 SKIDTUBE PROTECTOR, LH ON STANDARD SKIDTUBE	4.3 lb 1.95 kg	108.1 in 4.3 m	465 in-lb 8.4 kg-m	-43.4 in 1.7 m	-187 in-lb -3.3 kg-m
D119-646-314 SKIDTUBE PROTECTOR, RH ON STANDARD SKIDTUBE	4.3 lb 1.95 kg	108.1 in 4.30 m	465 in-lb 8.4 kg-m	43.4 in 1.7 m	187 in-lb 3.3 kg-m
D119-646-313 SKIDTUBE PROTECTOR, LH ON FLOAT SKIDTUBE	1.6 lb 0.72 kg	133.3 in 3.38 m	213 in-lb 2.4 kg-m	-43.4 in -1.7 in	69 in-lb 1.2 kg-in
D119-646-314 SKIDTUBE PROTECTOR, RH ON FLOAT SKIDTUBE	1.6 lb 0.72 kg	133.3 in 3.38 m	213 in-lb 2.4 kg-m	43.4 in 1.7 in	69 in-lb 1.2 kg-in

C

C

APPROVED

DESIGN	RF	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	VS		
CHECKED	MB	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9734	SHEET 8 OF 15
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	SKIDTUBE PROTECTOR KIT	NTS
DATE	17.06.27	COPYRIGHT © 2015 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	